

## DOT STRATEGIC GOAL: HUMAN AND NATURAL ENVIRONMENT

# Protect and enhance communities and the natural environment affected by transportation.

Transportation makes our communities more livable, enhancing the quality of our lives and environment. Transportation generates undesired consequences too, such as pollution, congestion, and the use of valuable land. DOT's objective is to advance the benefits of transportation while minimizing its negative impacts on our environment through a number of common interventions and actions: infrastructure investment (such as community focused transit development, investments in low-emissions transit vehicles, and the creation of meaningful alternatives to auto use, such as transit, walking paths and bikeways,) rulemaking (such as standards and regulations to reduce spills of transported material), compliance (enforcement and partnering to achieve standards), technology (fostering new materials and technologies to limit aircraft noise and lower vehicle emissions), and education (such as consumer awareness and campaigns to influence personal behavior). DOT programs can be aggregated into five major areas of environmental intervention and action: highway & transit, aviation, maritime (including pollution reduction and living marine resource protection), pipeline & hazardous materials.

## **HIGHWAY & TRANSIT**

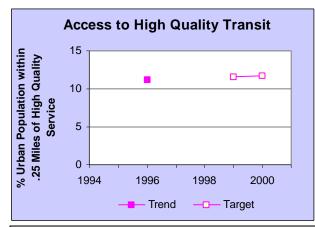
FHWA and FTA will partner with States, Metropolitan Planning Organizations, urban centers, and communities to strengthen the links between transit, highway, and communities, as reflected in sustainable transportation and land use decisions, improved options of transportation, and reduced environmental impacts. Livable Communities activities stress planned and

designed, community-oriented, and customer friendly transportation facilities and services. For FTA, a key supporting activity will be ongoing capital investment in transit infrastructure. FHWA implements and oversees the Congestion Mitigation and Air Quality (CMAQ) Improvement Program, which targets transportation investment to reduce mobile source emissions and to reduce congestion. FHWA supports research on transportation and air quality analysis, develops/provides information on effective approaches to improve air quality, and evaluates emissions impacts and costeffectiveness of transportation. FHWA also works to mitigate the environmental impacts of highway siting and improve wetland habitats. NHTSA's Partnership for New Generation Vehicles (PNGV) initiative advances our understanding of the relationship between vehicle design characteristic, vehicle crash-worthiness, and occupant protection. This will ensure that the increased fuel efficiency and reduced emissions of PNGVdeveloped vehicles are achieved without compromising safety.

#### **Livable Communities**

Transit's role in advancing our human and natural environment is strongest where pedestrian access to transit and other services reached by transit enable households and businesses to function with reduced use of the automobile (livable communities). Livable community benefits depend on transit's ability to serve as a desirable alternative to the automobile for a variety of trip purposes, particularly non-work trips, and to influence development patterns in a way that results in shorter trips and more walking trips.

**Livable Communities Initiative** works to improve the quality of life in communities through an active and participatory planning process which results in transit facilities that are customer-friendly and communityoriented, and which promote local land-use and transportation policies supportive of transit. At present there are projects in 21 communities totaling over \$51 million. Thirteen projects are within National Empowerment Zones/Enterprise Communities (EZ/ECs) with a total investment of over \$32 million. In addition, FTA continues to work with communities on transit-oriented development land use planning, sustainable transportation, and smart growth issues. The concepts embodied in the Livable Communities effort have been incorporated into the planning process that is part of all new starts projects.



**Performance Indicator:** Increase the percentage of the urban population living within .25 miles or a public transit stop with service frequency of 15 minutes or less (non rush hour).

2000 Goal: 11.68 percent

1999 Goal: 11.56 percent

1996 Performance: 11.22 percent

# **Congestion Mitigation Air Quality** (CMAQ) Improvement Program

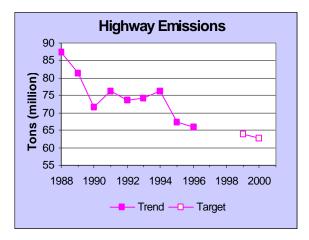
FHWA implements and oversees the CMAQ Improvement Program, which targets transportation investment to reduce mobile source emissions and reduce congestion. FHWA supports research on transportation and air quality analysis, develops/provides information on effective approaches to improve air quality, and evaluates emissions impacts and cost-effectiveness of transportation.

• CMAQ Improvement Program funds environmental mitigation measures in the Clean Air Act non-attainment areas and Surface Transportation Program (STP) activities in other areas. It is intended to reduce congestion and improve air quality. Since 1992, the initial year authorized, to 1998, obligations have grown from \$340 million to over \$1.192 billion annually. The CMAQ program offers States flexibility to fund a wide range of projects—the largest share thus far is funding transit projects (46.8 percent), followed by traffic flow (30.9 percent).

## **Other Highway Programs**

A transportation/air quality public education campaign was implemented in 3 pilot sites across the country in September. In addition, preliminary studies were done to identify examples of Federal-aid highway projects involving efforts to characterize, protect, and restore important habitat and ecosystem linkages. The FHWA has identified a variety of activities carried out by our field offices and the State DOTs including the identification, documentation, and mitigation of impacts to significant wildlife habitats and wildlife travel corridors. Identification of these projects and activities indicate that the Federal-aid highway program has included, and continues to include measures to evaluate,

protect, restore and enhance ecosystems, particularly their values and functions.



**Performance Indicator:** Reduce on-road mobile source emissions.

2000: Reduce by 2 percent from 1999, to a target of 62.7 million tons.

1996 Performance: 65.9 million short tons of mobile source emissions (mobile source emissions of carbon monoxide, hydrocarbons, nitrogen oxides, and PM-10) as reported in the latest Trends Report (January 1998).

#### RAIL

During FY 1998, FRA also continued to work with other Federal agencies, the rail industry, and States to assure that reasonable air quality standards for locomotives are developed by Environmental Protection Agency (EPA). FRA has worked with the EPA to ensure that Amtrak and commuter railroads were not unduly burdened by regulations and final rules issued by the EPA. As a result of FRA's efforts, the EPA granted passenger rail service providers five additional years to comply with the emission standards; agreed to work with DOT and rail passenger service providers to ensure reasonable compliance cost; and agreed to develop a mechanism rewarding existing and continuing investments in electrification.

# FUEL EFFICIENCY AND REDUCED EMISSIONS

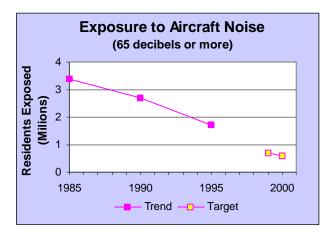
NHTSA's Partnership for New Generation Vehicles (PNGV) initiative advances our understanding of the relationship between vehicle design characteristic, vehicle crashworthiness, and occupant protection. This will ensure that the increased fuel efficiency and reduced emissions of PNGV-developed vehicles are achieved without compromising safety.

• Vehicle Safety Standards Program seeks to improve the crash avoidance and crashworthiness performance of motor vehicles through regulatory and non-regulatory alternatives. The program responds to rulemaking petitions and uses real world crash data, testing information, and studies on the costs of vehicle safety systems to support the development of and amendments to Federal motor vehicle safety standards (FMVSS).

#### **AIRCRAFT NOISE**

The FAA provides grants-in-aid for the mitigation of the noise impacts of aviation, such as soundproofing of residential and public buildings, and relocation assistance. The FAA also conducts research into the reduction of aviation noise.

The level of noise at the Nation's airports and surrounding areas continues to decline as airlines take older, noisier airplanes out of service. In a Report to Congress released in September 1998, the FAA reported that the proportion of quieter airplanes used by U.S. airlines increased from 75.5 percent to 79.8 percent. The improvement largely reflects compliance by the airlines with legislation passed in 1990 requiring that older, noisier airplanes be replaced by quieter airplanes by the year 2000.



**Performance Indicator:** Reduce the number of people in the U.S. exposed to significant aircraft noise (Decibel Noise Level of 65 dB or greater).

2000 Goal: Reduce by 64 percent

1999 Goal: Reduce by at least 60 percent from the 1995 baseline.

1995 Performance: Approximately 1.7 million.

#### **MARITIME SPILLS**

The USCG develops construction and operating standards for the waterborne shipment of goods that help prevent the accidental release of these goods into the environment; conducts over 50,000 inspections annually to ensure that U.S. and foreign vessels and waterside facilities are maintained and operated in a proper manner; and responds to oil and chemical spills to mitigate the environmental impact. The USCG also works to reduce the number of marine accidents through improved standards for commercial vessels and crew, and research to reduce the risk of maritime pollution.

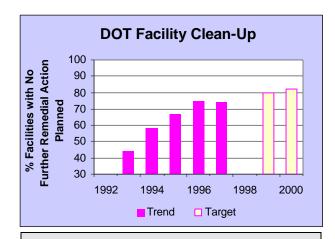
 Marine Environmental Protection Program goal is to minimize damage from potential spills of oil and hazardous materials. As one of the program's responsibilities, the USCG administers the Oil Spill Liability Trust Fund.

Oil Pollution Act of 1990 (OPA) specifies that the responsibility for cleaning up oil spills lies with the spiller; however, Congress appropriates \$50 million annually for emergency response to oil spills. This includes government costs for USCG or EPA responses when the spiller cannot be identified or does not respond. The balance of the \$1 billion in the Fund is available to adjudicate and pay claims for specific types of losses attributable to a spill.

The USCG also oversees the development and approval of industry plans for the cleanup of oil spills, as required by the OPA. It represents the Department of Transportation in the development of a multi-agency National Contingency Plan for responding to oil spills.

During FY 1998, the USCG managed over 1220 active cases, including many begun in prior years. FY 1998 commitments for removal efforts for these cases totaled \$50.7 million and another \$6.0 million was spent to adjudicate and pay claims.

A major responsibility of the USCG is the enforcement of the International Convention for the Prevention of Pollution from ships, known as MARPOL. Included in this enforcement mandate are oil pollution, noxious liquid pollution, and plastic garbage pollution.



**Performance Indicator:** Reduce the rate of oil spilled into the water by maritime sources.

2000 Goal: 4.83 gallons/million gallon shipped.

1999 Goal: 5.04 gallons/million gallons shipped.

1997 Performance: 1.37 gallons/million gallons

shipped.

 $1996\ Performance:\ 6.66\ gallons/millions\ gallons$ 

shipped.